



Original communication

A satisfaction survey conducted on patients of a medico-legal consultation

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ABSTRACT

In 2006, a medico-legal consultation service devoted to adult victims of interpersonal violence was set up at the Lausanne University Hospital Centre, Switzerland: the Violence Medical Unit. Patients are received by forensic nurses for support, forensic examination (in order to establish medical report) and community orientation.

In 2008, a telephone survey was conducted on patients. The objectives of the survey were to estimate the degree of patients' satisfaction and to document the use of the medical report by six questions. Among the 476 patients admitted to the VMU in 2007, 132 were interviewed. Their overall satisfaction was high with an average mark of 8.7/10. The medical report was used extensively by the interviewed victims (81%) for its primary function – to be produced as evidence.

As the consultations are financed by public funds, these results were of interest for advocacy of long-lasting financial support.

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1. Introduction

In 2006, the Violence Medical Unit (VMU), a medico-legal consultation service was created in the University Centre of Legal Medicine at Lausanne University Hospital (Switzerland).^{1,2} The VMU consultation deals with adult victims of physical and/or psychological interpersonal violence, occurring in any setting (family, between partners or ex partners, community), while victims of sexual violence are referred to the gynecological department.³ The first step of a consultation is to give enough time to the patient to relate his/her own history of violence in quiet surroundings and in confidence. This is important because the factual and contextual clarification of the violent event is an important factor in the prevention of possible psychiatric consequences.⁴ Secondly, a careful physical examination is carried out in order to establish medico-legal documentation. This includes a medical report of subjective complaints and obvious lesions as well as photographs of injuries. The medico-legal documentation is essential for victims as it can legally help them with their rights.⁵ The medico-legal report is at the patients' disposal a few days after the consultation; some of them prefer to leave it at the VMU for security reasons particularly in case of domestic violence.

During the last step of the consultation, priority needs and available resources are identified with the patient and a referral within the community network is suggested to provide the best possible support and follow-up, which is necessarily ensured outside the VMU. These medico-legal consultations are carried out by forensic nurses, supervised by forensic medical doctors.⁶ For every patient a medical file is completed by the nurse and epidemiological data is collected in electronic files. The consultations are free for the patients, completely financed by the public health department of the State (Canton de Vaud).

In 2008, two years after the opening of the VMU, a patient satisfaction survey was carried out in order to evaluate part of the clinical activities. This survey had two objectives: (1) estimate the degree of satisfaction of patients toward their consultation and (2) document the use and usefulness of the medical report.

2. Patients and methods

The protocol of the survey was approved by the local ethics committee in July 2008. A telephone survey was conducted between July and September 2008. It was carried out by a research fellow who does not practice at the VMU, in order not to influence patients' answers.

Inclusion criteria included all the patients who consulted at the VMU in 2007 (476 patients) and for whom a complete medical file

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Table 1
Questionnaire.

<i>Satisfaction toward consultation</i>
Q1. "Taken as a whole, have you been satisfied with the consultation you had on (the date of the consultation was reminded) at the VMU?" – on a 1 to 10 scale.
Q2. "Your consultation lasted (the exact length of the consultation was reminded). According to you, was it too long, too short, the right length, no opinion?"
Q3. "According to you, was the nurse sympathetic to what you explained?" – very sympathetic, – rather sympathetic, – not very sympathetic, – not at all sympathetic, – no opinion.
Q4. "According to you, was the information you were given at the VMU during the consultation clear?" – very clear, – rather clear, – not very clear, – not at all clear, – no opinion.
<i>Use and usefulness of the medical report</i>
Q5. (P1) "Can you tell us if you have passed on your medical report to a third person? If yes, to whom?" – open question, no answer proposed.
Q6. "Finally, according to you, was it useful to establish this medical report?" – very useful, – rather useful, – not very useful, – not at all useful, – no opinion.

was available, that is 441 people. From this number, 13 minor patients (under 18 years old, age of civil majority) have been excluded as well as 24 non French speaking patients (the survey could not be carried out by a professional interpreters), 6 patients for whom no medical report had been established, 16 patients who had no safe phone number or had not authorized us to keep in touch with them (this information is systematically recorded in the medical file). After making these exclusion criteria, we reached a sample of 382 patients.

This sample was split into 2 groups based on whether the patients took their medical report or not. Indeed, patients who did not take their medical report couldn't answer the fifth question (Q5) and thus each group had a different questionnaire. **Population 1 (P1):** patients who took their medical report. It included 337 people throughout 2007, 160 consulted from 01.01.2007 to 30.06.2007 and 177 from 01.07.2007 to 31.12.2007. After checking that there was no significant difference in age, sex and typology of violence reported (data not reported), we limited the phone survey to the patients who consulted during the last 6 months of 2007, as we hypothesized that this sample would be enough and was more adapted to our resources. We chose patients from the second semester because they probably remembered their consultation with more details than those who consulted during the first 6 months of 2007. **Population 2 (P2):** patients who did not take their medical report. It included 45 people throughout 2007, 29 consulted from 01.01.2007 to 30.06.2007 and 16 from 01.07.2007 to 31.12.2007.

The questionnaire was composed of 6 questions formulated using common language (Table 1).

We made up to six attempts at telephone to contact each patient, over two week days including Wednesday (school day off).

Table 3
Eligible patients' characteristics for populations 1 (P1) and 2 (P2).

Patients	VMU (n = 441)	P1 eligible (n = 177)	P1 vs VMU p value (test)	P2 eligible (n = 45)	P2 vs VMU p value (test)	P1 vs P2 eligible p value (test)
Sex:						
Female n (%)	206 (47%)	79 (45%)	0.639	23 (51%)	0.573	0.436
Male n (%)	235 (53%)	98 (55%)	(χ^2)	22 (49%)	(χ^2)	(χ^2)
Age:						
Mean (SD)	33 (12)	34 (12)	0.349 (Student)	30 (9)	0.103 (Student)	0.037 ^a (Student)
Typology of violence:						
Family/partner n (%)	144 (33%)	48 (27%)	0.158	19 (42%)	0.211	0.049 ^a
Community n (%)	293 (67%)	129 (73%)	(χ^2)	26 (58%)	(χ^2)	(χ^2)

^a Statistically significant difference.**Table 2**
Participation in the survey for populations 1 (P1) and 2 (P2).

Patients	Reached/Eligible	Refused to answer (n)	Accepted to answer (n)
P1	116/177 (66%)	2	114
P2	18/45 (40%)	0	18
Total	134/222 (60%)	2	132

The difference between P1 and P2 in "success to reach" eligible patients is statistically significant: $p = 0.002$ (chi-square test).

Data was registered using Microsoft® Office Excel® 2007 (Microsoft Corporation) and statistical analyses were conducted in Stata®/IC 11.1 (StataCorp® 2009 LP). We used chi-square or Fisher's exact to test difference in ratios, Student's *t*-test (two-sample, unpaired) to test difference in means or two-sample Wilcoxon Mann–Whitney rank-sum when distribution of responses was skewed.

3. Results

3.1. Participation in the survey

Overall, we could reach 134 (60%) of the 222 eligible patients. Only 2 refused to answer the questions. 132 patients were interviewed. Therefore, 98.5% of patients contacted accepted to answer our questions. Participation in the survey for populations 1 and 2 is summarized in Table 2.

3.2. Patients' characteristics

Tables 3 and 4 summarize patients' characteristics in terms of sex, age and type of reported violence.

3.3. Questionnaire

Table 5 summarizes patients' answers to the questionnaire.

Among population 1 of patients who took their medical report, 80.7% of those interviewed transmitted their medical report to another person (Q5). In 84% of these cases, the medical report was passed on to a judge, a lawyer, the police or the LAVI Centre (a specialized centre for legal and social support). As one of our objectives was to document the use and usefulness of the medical report, we compared, among population 1, the usefulness of the medical report between patients who passed on their medical report with those who did not. Results are presented in Table 6.

Furthermore, still in accordance with the objectives of the survey, we compared the average mark of satisfaction with the usefulness of the medical report for all interviewed patients. Results are presented in Table 7.

Table 4
Respondent patients' characteristics for populations 1 (P1) and 2 (P2).

Patients	P1 eligible (n = 177)	P1 respondent (n = 114)	P1 p value (test)	P2 eligible (n = 45)	P2 respondent (n = 18)	P2 p value (test)	P1 vs P2 respondent p value (test)
Sex:							
Female n (%)	79 (45%)	43 (38%)	0.243	23 (51%)	8 (44%)	0.633	0.586
Male n (%)	98 (55%)	71 (62%)	(χ^2)	22 (49%)	10 (56%)	(χ^2)	(χ^2)
Age:							
Mean (SD)	34 (12)	34 (12)	1.000 (Student)	30 (9)	27 (8)	0.222 (Student)	0.009 ^a (Student)
Typology of violence:							
Family/partner n (%)	48 (27%)	23 (20%)	0.187	19 (42%)	7 (39%)	0.808	0.078
Community n (%)	130 (73%)	91 (80%)	(χ^2)	26 (58%)	11 (61%)	(χ^2)	(χ^2)

^a Statistically significant difference.

4. Discussion

Concerning the methodology, limiting the survey to the second half of 2007 for population 1 of patients who took their medical report (P1) may have introduced a selection bias and represent the major limitation of this survey. Nevertheless, we ensured that there was no significant difference in terms of age, sex and typology of violence reported, between patients who consulted during the first and the second 6 months of 2007. Furthermore, no change in the organization of the medico-legal consultations was introduced during this year. Our choice was based on the idea that patients who consulted during the second semester had a better recollection of their consultation because of lesser time elapsed between the consultation and the interview. For population 2 of patients who didn't take their medical report (P2), as we only reached 5 patients of 16 from the second half of 2007, we decided to extend the survey to the first six months, in order to get a usable sample.

Concerning the results, first we can notice that we reached 60% of all eligible patients. But there was a significant difference in "success to reach" population 1 (66%) and population 2 (P2) of patients who did not take their medical report (40%). A significant difference in typology of violence and age was also observed between eligible patients of P1 and P2. Indeed, eligible patients of P2 reported more family/partner violence and were younger. As family/partner violence situations are usually more complex, we can hypothesize that it contributed to the difficulty of being reached by phone. Age could have the same effect, since the personal situation of young people probably changes more rapidly. There was no significant difference in terms of typology of violence

between eligible patients of P1 and other VMU patients as well as between eligible patients of P2 and other VMU patients; even if there was less family/partner violence in P1 than among VMU patients and more in P2 than among VMU patients. We can reasonably think that the sample of eligible patients is representative of the VMU patients.

Regarding patients' answers to the questionnaire, there was no significant difference between the two populations (P1 and P2) for all the questions. Thus, if patients did not collect their medical report, it did not mean that they were not satisfied with their consultation at the VMU. According to the first objective that was to estimate patients' satisfaction toward their consultation at the VMU, we noticed that the patients we could get in touch with expressed general satisfaction, especially toward the welcome extended to them and the listening provided. Three-quarter of consultations at the VMU last between 1 and 2 h, whatever the typology of violence is. 73.5% of interviewed patients, however, found that the consultation was the right length. Indeed, even if the medico-legal examination is often long, it is important for the victim to speak freely about his or her own history of violence. As VMU professionals give great attention to these aspects of the consultation, this feed-back was of value to the staff. As the VMU does not provide follow-up for the victims, it was also important to evaluate how the information regarding referral within the community network was perceived. This information is often overwhelming and sometimes complex. Thus, the rate of 92.4% of interviewed patients who found the information they were given was "very or rather clear", can be considered as a satisfying result. The nurses' good knowledge of the network and its partners has probably contributed to this result.

Table 5
Answers to the questionnaire for populations 1 (P1) and 2 (P2).

	Total P1 – P2 (n = 132)	P1 (n = 114)	P2 (n = 18)	P1 vs P2 p value (test)
Q1 Mark given to the consultation				
Maximum mark (10/10)	42.4% (n = 56)	43% (n = 49)	38.9% (n = 7)	0.744 (χ^2)
Average mark (SD)	8.7 (1.6)	8.7 (1.6)	8.7 (1.5)	0.850 (Wilcoxon)
Q2 Length of the consultation				
The right length	73.5% (n = 97)	74.6% (n = 85)	66.7% (n = 12)	0.481 (χ^2)
Q3 Attention paid to the patient				
Very/rather sympathetic	94.7% (n = 125)	95.6% (n = 109)	88.9% (n = 16)	0.244 (Fisher)
Q4 Clarity of information				
Very/rather clear	92.4% (n = 122)	92.1% (n = 105)	94.4% (n = 17)	0.592 (Fisher)
Q5 Medical report passed on to a third person				
Yes		80.7% (n = 92)		
No		15.8% (n = 18)		
Don't remember		3.5% (n = 4)		
Q6 Usefulness of the medical report				
Very/rather useful	85.6% (n = 113)	84.2% (n = 96)	94.4% (n = 17)	0.224 (Fisher)

Table 6
Perceived usefulness of the medical report in population 1 (P1) compared by use, % (n).

Q6 Usefulness of the medical report	Q5 Medical report passed on to a third person			
	Yes	No	Don't remember	Total
Very useful	72.8% (67)	44.4% (8)	50.0% (2)	67.5% (77)
Rather useful	13.0% (12)	33.3% (6)	25.0% (1)	16.7% (19)
Rather not useful	7.6% (7)	16.7% (3)	0.0% (0)	8.8% (10)
Not at all useful	4.4% (4)	0.0% (0)	0.0% (0)	3.5% (4)
No opinion	2.2% (2)	5.6% (1)	25.0% (1)	3.5% (4)
Total	100.0% (92)	100.0% (18)	100.0% (4)	100.0%

Fisher's exact test: $p = 0.054$.

Table 7
Patients' satisfaction toward their consultation (P1 + P2) compared by perceived usefulness of the medical report.

Q6 Usefulness of medical report	Q1 Mark given to the consultation	
	Average mark	Standard Deviation
Very/rather useful ($n = 113$)	8.88	1.35
Rather not/not at all useful ($n = 19$)	7.58	2.39

Two-sample Wilcoxon rank-sum (Mann–Whitney) test: $p = 0.008$.

In P1, the medical report was used extensively by the interviewed victims (80.7%) according to its primary function, namely to be produced as evidence. They passed it on to professionals or services that could help them press for their rights, mainly judges or lawyers. If we study the distribution of the answers concerning the usefulness of the medical report, it appears that the majority of patients, no matter if they passed on their medical report or not, found “very or rather useful” to have had it established. This result can be related to the 94.4% of interviewed patients of P2 who found the medical report “very or rather useful” even if they did not collect it. Thus, with others, we maintain that the medical report, apart from its legal function, has also a therapeutic value and can be considered as a medical service provided.⁵

Finally, it appears that among all interviewed patients (P1 and P2), those who answered that the medical report was “very or rather useful”, attributed a significantly superior average mark to their consultation (8.88) than those who answered the medical report was rather not or not at all useful (7.58). Nevertheless, the average mark of 7.58 can be considered as fair.

5. Conclusions

If satisfaction surveys have been regularly carried out by Lausanne University Hospital Centre since 1995, this is the first one interested in clinical legal medicine. Moreover, to our knowledge, satisfaction surveys in legal medicine reported in the literature have only concerned forensic pathology.

In accordance with the initial objectives that were, firstly, to estimate the satisfaction of patients toward the consultation; and secondly, to document the use and usefulness of the medical report, we can say that patients expressed general satisfaction toward their consultation, that most of them found the medical report “very useful” and that they used it according to its primary function. As the consultations are financed by public funds, this result was of interest for advocacy of long-lasting financial support.

This research has however a limitation as the results do not reflect the opinion of all VMU patients but only the opinion of those who answered the telephone survey. Moreover, as there is a higher rate of family/partner violence among patients who did not pick up their medical report and we could not reach, it could be interesting to conduct a study devoted to follow up of these victims.

Conflict of interest

All authors assess that there is no conflict of interest with other people or organizations that could inappropriately influence their work.

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Ethical approval

The protocol of the survey was approved by the local ethics committee in July 2008.

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